

REMARKS/ARGUMENTS

In the Office Action mailed January 9, 2009, claims 1, 3, and 5-7 were rejected. Additionally, claim 4 was objected to, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In response, Applicants hereby request reconsideration of the application in view of the amendments and the below-provided remarks.

For reference, claim 7 is amended. In particular, claim 7 is amended to recite a data processing apparatus. This amendment is supported, for example, by the subject matter described in the specification at page 1, lines 1 and 2, as well as in the original claims of the specification.

Also, claims 8-12 are added. In particular, claim 8 is added to recite all of the subject matter of claims 1 and 4. Consequently, claim 4 is canceled. Additionally, claims 9, 10, and 11 are added to recite the subject matter of claims 3, 5, and 6, respectively, depending from claim 8. Claim 12 is added to recite language similar to the subject matter of claim 4, depending from claim 7.

Allowable Subject Matter

Applicants appreciate the Examiner's review of the claims and determination that claim 4 recites allowable subject matter. In particular, the Office Action states that claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. As suggested in the Office Action, claim 8 is added to recite all of the limitations of claims 1 and 4. Accordingly, Applicants submit that claim 8 recites allowable subject matter.

Additionally, while the Office Action provides a statement of reasons for the indication of allowable subject matter, the Office Action's statement is directed to specific aspects of certain claims and not necessarily all of the claims. Applicants note that the Office Action's comments may have paraphrased the language of the claims and it should be understood that the language of the claims themselves set out the scope of the

claims. Thus, it is noted that the claim language should be viewed in light of the exact language of the claim rather than any paraphrasing or implied limitations thereof.

Claim Rejections under 35 U.S.C. 101

Claim 7 was rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter. In particular, the Office Action states that claim 7 does not fall within one of four statutory categories of invention.

Applicants submit that claim 7 is amended to recite statutory material. In particular, claim 7 is amended to recite a data processing apparatus. This amendment is supported by the specification (e.g., see page 1, lines 1 and 2). Accordingly, Applicants respectfully request that the rejection of claim 7 under 35 U.S.C. 101 be withdrawn.

Claim Rejections under 35 U.S.C. 103

Claims 1, 3, and 5-7 were rejected under 35 U.S.C. 103(a) as being unpatentable over Pohlmeier et al. (U.S. Pat. Pub. No. 2002/0101884, hereinafter Pohlmeier) in view of Sato et al. (U.S. Pat. No. 5,596,582, hereinafter Sato). However, Applicants respectfully submit that these claims are patentable over Pohlmeier and Sato for the reasons provided below.

Independent Claim 1

Applicants assert that claim 1 is patentable over Pohlmeier and Sato for at least two reasons. Claim 1 recites:

A data processing apparatus, for receiving a communication signal that comprises a message containing a sync break interval with a unique bit pattern, the message containing a sync field interval identified by the sync break interval, a timing property of the sync field interval specifying a length of bit periods of the message, the apparatus comprising:

- an input port for receiving the communication signal;
- a reception circuit for sampling and processing bits from the message;
- a clock source circuit for supplying a sampling clock signal to the reception circuit to define time points for said sampling, the clock source circuit being arranged to adapt a frequency of the sampling clock signal to the timing property of the sync field interval, the clock source circuit being arranged to search for potential sync break intervals that match the unique bit pattern for a range of bit period values, the clock source circuit verifying for each potential sync break interval whether the sync field interval identified by that potential

sync break interval specifies a bit period with a duration so that the sync break interval matches the unique pattern for the specified bit period, as a condition prior to supplying the sampling clock signal at the adapted frequency specified by the sync field interval identified by the potential sync break interval, wherein the supply of the sampling clock signal is suppressed after an end of a preceding message until said condition is met. (Emphasis added.)

Claim 1 is patentable over Pohlmeier and Sato for at least the two following reasons: (1) the combination of cited references do not teach suppressing the supply of the sampling clock signal after an end of a preceding message until the condition of searching, verifying, and adapting is met, and (2) the proposed combination of the teachings of Pohlmeier with Sato is improper because the reasoning presented in the Office Action in support of the proposed combination is based on impermissible hindsight. Hence, Applicants submit that claim 1 is patentable over the combination of Pohlmeier and Sato because the combination of cited references does not teach all of the limitations of the claim and the proposed combination of references is improper.

1) The combination of cited references do not teach the indicated limitations of the claim

In contrast to the language of the claim, the combination of Pohlmeier and Sato does not teach suppressing the supply of the sampling clock signal after an end of a preceding message until the condition of searching, verifying, and adapting is met. For reference, the Office Action acknowledges that Pohlmeier and Sato do not explicitly teach the indicated language of the claim. However, the Office Action states that Sato purportedly suggests the indicated limitation. The Office Action relies solely on Sato as suggesting the indicated limitation.

Sato is generally directed toward locating a synchronizing symbol in a modulated transmission signal. Sato, abstract. In particular, Sato teaches that a sync frame may be located by shifting a symbol-length window bitwise along the reception sample sequence until a sync period is identified through correlation values. Sato, col. 9, lines 33-62. As part of this location method, Sato teaches that a receiver clock generator 65 “produces various receiver clock sequences.” Sato, col. 8, lines 39-50. Sato teaches that the receiver clock generator 65 “produces various receiver clock sequences” that are

“designated by the reference symbol used for the transmitter clock generator 49.” Id. The Office Action appears to imply that producing a clock designated by a reference symbol suggests that the generator 65 stops producing a clock after the end of a preceding message until the next reference symbol is designated. However, there appears to be nothing in Sato to suggest that Sato stops the clock generator 65 after a preceding message. Sato only teaches producing a clock sequence. Sato merely teaches processing one cycle of one message. There is nothing in Sato to suggest that the clock generator 65 produces a clock sequence or suppresses the generation of a clock sequence after the end of a preceding message because Sato appears to be silent with regard to the function of the clock generator 65 after the end of a preceding message.

Additionally, the Office Action quotes Sato as teaching “the supply of the sampling clock signals depend on the detection of the synchronization patterns.” Office Action, page 7. This quoted language is apparently not found in Sato. It appears that the Office Action paraphrased claim 1 of Sato and attributed the paraphrase as a direct quote of Sato. Claim 1 of Sato teaches “detecting synchronization patterns in said reception sample sequence” and “generating said clock sequence in response to said synchronization patterns.” However, this teaching is no different from the teachings of Sato above. The Office Action appears to imply that generating a clock in response to a detection suggests suppressing the clock until the occurrence of the detection. In other words, according to the Office Action, generating a clock sequence in response to a detection suggests “not generating” the clock sequence until the detection occurs. However, affirmatively stating that the clock generator 65 generates a clock in response to a detection does not suggest not generating the clock until the detection occurs because determining what the clock generator 65 does before or after the detection, without more, is merely conjecture. Hence, detecting a pattern and generating a clock sequence in response to the detection still fails to teach the indicated limitation because Sato does not teach what the clock generator 65 does before or after the end of a preceding message.

- 2) The proposed combination of the teachings of Pohlmeier with Sato is improper because the reasoning presented in the Office Action in support of the proposed combination is based on impermissible hindsight

Moreover, the proposed combination of the teachings of Pohlmeyer with Sato is improper because the reasoning presented in the Office Action in support of the proposed combination is based on impermissible hindsight. Specifically, the reasoning presented in the Office Action to combine the cited references merely employs impermissible hindsight because it relies on a motivation of the present application, without providing any other evidence of disclosure in the cited references or evidence of common knowledge. In support of the rejection, the Office Action states:

Therefore, it would have been obvious to one of ordinary skill in the art to have incorporated these features into the system of Pohlmeyer, as modified by Sato, in the manner as claimed, for the benefit of generating optimum sampling clock signals based on detecting the synchronization patterns. Office Action, 1/09/09, page 7 (emphasis added).

To the extent that Sato might generate a clock sequence, the generation of a clock sequence described in Sato does not take into account suppressing the generation of the clock sequence after the end of a preceding message until a condition is met. This is acknowledged in the Office Action because the Office Action recognizes that Pohlmeyer and Sato do not explicitly teach such functionality. Office Action, page 6.

Therefore, in the absence of some additional reasoning, it appears that the only basis for the asserted conclusion—that suppressing the generation of the sampling clock signals would generate “optimum sampling clock signals”—stems directly from the disclosure of the present application. In fact, the Office Action does not attempt to identify any rationale to support the assertion that suppressing the generation of sampling clock signals might result in “optimum” sampling clock signals. Rather, the primary reason for the proposed combination is merely derived from the present application, which states that:

When all instructions of a burst 22 have been processed, instruction processing is suspended until the next burst 22 is triggered. Preferably no or substantially no internal signal transitions occur in instruction processor 100 during suspension so as to minimize power consumption. Present Application, page 4, line 17, through page 5, line 5 (emphasis added).

While the present application does not explicitly use the phrase “optimum sampling clock signals,” as stated in the Office Action, the statement of optimum

operation is merely a generalization of the specific advantages achieved by embodiments described in the present application, namely, minimization of power consumption. Therefore, the assertion that it would be obvious to combine the teachings of Pohlmeier with Sato in order to make optimum sampling clock signals is not supported by any specific evidence other than the disclosure of the present application. Therefore, since the only specific rationale for implementing the claimed embodiments is found in the present application, the reasoning presented in the Office Action to combine the cited references merely employs impermissible hindsight that is ultimately based on the disclosure of the present application.

For the reasons presented above, the combination of Sato and Pohlmeier does not teach all of the limitations of the claim because Sato does not teach suppressing the supply of the sampling clock signal after an end of a preceding message until the condition of searching, verifying, and adapting is met, as recited in the claim. Additionally, as a separate basis for patentability, the proposed combination of the teachings of Pohlmeier with Sato is improper because the proposed combination is based on impermissible hindsight, rather than some articulated reasoning with some rational underpinning. Accordingly, Applicants respectfully assert claim 1 is patentable over the proposed combination of Sato and Pohlmeier.

Independent Claim 7

Applicants respectfully assert independent claim 7 is patentable over the combination of cited references at least for similar reasons to those stated above in regard to the rejection of independent claim 1. Claim 7 recites subject matter which is similar to the subject matter of claim 1 discussed above. Although the language of claim 7 differs from the language of claim 1, and the scope of claim 7 should be interpreted independently of other claims, Applicants respectfully assert that the remarks provided above in regard to the rejection of claim 1 also apply to the rejection of claim 7.

Dependent Claims

Claims 3-6 depend from and incorporate all of the limitations of the corresponding independent claim 1. Applicants respectfully assert claims 3-6 are

allowable based on an allowable base claim. Additionally, each of claims 3-6 may be allowable for further reasons, as described below.

In regard to claim 6, Applicants respectfully submit that claim 6 is patentable over the combination of Pohlmeier and Sato because the combination of cited references does not teach all of the limitations of the claim. Claim 6 recites “the comparison circuit outputting an enabling signal to enable supplying the sampling clock signal at the adapted frequency when a ratio between the first and second number in a combination is in a predetermined range” (emphasis added). The Office Action cites Sato (col. 9, line 51 to col. 10, line 1), and purports that Sato suggests the limitation because “the interval detector measures the time interval of the maxima in terms of sampling clocks as a detected count of the sampling clocks” and “it compares the measured count with the reference count.” While Sato does teach a “first number” in the measured count and a “second number” in the reference count, as stated above, Sato does not teach the limitation of claim 6 because Sato does not teach a ratio between the first and second number. Sato does not use a ratio of the measured and reference counts because the counts are compared directly. Sato, col. 9, line 66 to col. 10, line 1. Additionally, while Sato does teach a method to generate a clock sequence, Sato does not teach outputting an enabling signal to generate a clock sequence when a ratio between two numbers is in a predetermined range. Accordingly, Applicants respectfully assert that claim 6 is patentable over Pohlmeier and Sato because Sato does not teach the indicated limitations.

CONCLUSION

Applicants respectfully request reconsideration of the claims in view of the amendments and the remarks made herein. A notice of allowance is earnestly solicited.

At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account **50-4019** pursuant to 37 C.F.R. 1.25. Additionally, please charge any fees to Deposit Account **50-40194** under 37 C.F.R. 1.16, 1.17, 1.19, 1.20 and 1.21.

This response is accompanied by the appropriate fee to obtain a 2-month extension of the period for responding to the Office Action, thereby moving the deadline for response from April 9, 2009, to June 9, 2009.

Respectfully submitted,

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